

IN THE CLAIMS

1. (Currently amended) A medical electrical lead, comprising:
 - an elongate lead body;
 - a conductive coil extending along a portion of the lead body;
 - a conductive wire or cable extending along a portion of the lead body, the conductive wire or cable comprising an insulative outer layer having an outer diameter, the insulative outer layer removed along a segment of the wire or cable to form an uninsulated portion; and
 - a conductive component coupling the coil to the wire or cable and including a first side, a second side opposing the first side, a first side wall extending from the first side to the second side and a second side wall opposing the first side wall and extending from the first side to the second side, a first groove formed in the first side between the first side wall and the second side wall and having an open side extending along the first side and between the first side wall and the second side wall for receiving the uninsulated portion of the wire or cable, and a second groove formed in the second side;
 - wherein the first groove holds at the uninsulated portion of the wire or cable extending directly through the first groove and the second groove holds a portion of the coil,
 - the first groove having a groove width smaller than the outer diameter of the insulative outer layer.
2. (Original) The lead of claim 1, wherein the second side includes a protruding surface in which the second groove is formed.
3. (Previously Presented) The lead of claim 2, further comprising:
 - a lumen disposed within the lead body wherein the wire or cable extends within the lumen of the lead body;
 - the coil extends around an outer surface of the lead body; and

the first side of the conductive component is positioned within the lumen of the lead body and the protruding surface of the second side of the conductive component extends through the outer surface of the lead body.

4. (Original) The lead of claim 1, wherein the wire or cable includes a proximal portion and a distal portion, the proximal portion extending proximally from the portion held in the first groove and the distal portion extending distally from the portion held in the first groove.

5. (Original) The lead of claim 4, wherein the proximal and distal portions of the wire or cable each include an insulative outer layer.

6. (Previously presented) The lead of claim 1, wherein
the portion of the wire or cable is connected within the first groove by indentation of the first side wall and the second side wall.

7. (Previously presented) The lead of claim 1, wherein
the portion of the wire or cable is connected within the first groove by inward deformation of portions of the first side wall and the second side wall in proximity to the first side.

8. Cancelled. The lead of claim 1, wherein the portion of the wire or cable is connected within the first groove.

9. (Cancelled)

10. (Cancelled)

11. (Original) The lead of claim 1, wherein the second groove includes a plurality of grooves.

12. (Previously presented) The lead of claim 11, wherein the portion of the coil includes a plurality of filars, each of which is held within a one of the plurality of grooves.

13. (Previously presented) The lead of claim 1, wherein another portion of the coil forms a defibrillation electrode.

14. (Original) The lead of claim 1, wherein the component is formed from a length of strip stock by a stamping process.

15. (Original) The lead of claim 1, wherein the component includes a grain orientation approximately perpendicular to the first groove.

16. (Original) The lead of claim 1, wherein the component is formed of a material comprising tantalum.

17. -29 (Cancelled)

30. (Currently amended) A component coupling a conductive wire or cable to a conductive coil of a medical electrical lead, comprising:

a first side including a first groove formed therein;

a second side opposing the first side and including a second groove formed therein;

a first side wall extending from the first side to the second side; and

a second side wall opposing the first side wall and extending from the first side to the second side,

the first groove formed in the first side between the first side wall and the second side wall and having an open side having a first groove width extending along the first side and between the first side wall and the second side wall for receiving an uninsulated portion of the conductive wire or cable,

wherein the first groove is adapted to hold at the uninsulated portion of the conductive wire or cable extending directly through the first groove and the second groove is adapted to hold a portion of the conductive coil,
the first groove width being smaller than an outer diameter of an insulated portion of the conductive wire or cable.

31. (Previously presented) The component of claim 30, wherein the second side includes a protruding surface in which the second groove is formed.
32. (Previously Presented) The component of claim 30, wherein the component is formed from a length of strip stock.
33. (Original) The component of claim 30, further comprising a grain orientation approximately perpendicular to the first groove.
34. (Original) The component of claim 30, wherein the component is formed from a material comprising tantalum.
35. (Previously presented) The lead of claim 1, wherein the second groove extends approximately perpendicular to the first groove.
36. (Previously presented) The lead of claim 1, wherein the portion of the coil includes a plurality of filars.
37. (Previously presented) The lead of claim 36, wherein the plurality of filars are welded within the first groove.
38. (Previously presented) The lead of claim 12, wherein each of the plurality of filars is welded within one of the plurality of grooves.

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39. (Previously presented) The lead of claim 1, wherein the component is formed of a material comprising platinum.

40. (Previously presented) The lead of claim 1, wherein the component is formed of a material comprising stainless steel.

41. (Previously presented) The lead of claim 1, wherein the component is formed of a material comprising titanium.

42. (Previously presented) The lead of claim 1, wherein the first groove is formed by an EDM process.

43. (Previously presented) The component of claim 30, wherein the second groove extends approximately perpendicular to the first groove.

44. (Previously presented) The component of claim 30, wherein the second groove includes a plurality of grooves.

45. (Previously presented) The component of claim 30, wherein the component is formed of a material comprising platinum.

46. (Previously presented) The component of claim 30, wherein the component is formed of a material comprising stainless steel.

47. (Previously presented) The component of claim 30, wherein the component is formed of a material comprising titanium.

48. (Previously presented) The component of claim 30, wherein the first groove is formed by an EDM process.

49-50. (Cancelled)

51. (Currently amended) A medical electrical lead, comprising:

an elongate lead body;
a conductive coil extending along a portion of the lead body;
a conductive wire or cable extending along a portion of the lead body and having an outer insulating layer having a first outer diameter, the outer insulating layer removed along a portion of the wire or cable forming an uninsulated portion, the uninsulated portion having a second outer diameter; and

a conductive component coupling the coil to the wire or cable and comprising:

a first side,
a second side opposing the first side,
a first side wall extending from the first side to the second side,
a second side wall opposing the first side wall and extending from the first side to the second side,
a first groove formed in the first side between the first side wall and the second side wall and having a width along the first side defined by the first side wall and the second side wall for receiving a portion of the wire or cable from the first side;
and a second groove formed in the second side;
wherein the uninsulated portion of the wire or cable extends directly through the first groove and a portion of the coil extends through the second groove,
~~the portion of the wire or cable extending through the first groove having the outer insulating layer removed;~~
the width of the first groove being smaller than the first outer diameter of the outer insulating layer corresponding to a diameter of the portion of the wire or cable having the outer insulating layer removed.
the uninsulated portion of the wire or cable held within the first groove by inward deformation of the first side wall toward the second side wall along the first side.

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Please ADD the following NEW claim:

52. (New) The medical electrical lead of claim 51 wherein the first groove having a height that is greater than the second outer diameter of the uninsulated portion of the wire or cable.